

facelift
access and safety made easy

0800 52 15 95
www.facelift.co.uk

skyjack 3219, 3226 & 4632

shortform operating instructions



SAFETY TIPS

ALWAYS

- Inspect your machine before use.
- Check all operations including ground controls.
- Check ground conditions.
- Check clearance from overhead obstructions (power cables, building projections etc).
- Plan your task/job.
- Use sole boards under your outriggers at all times regardless of ground conditions.
- Stabilise and level machine before use.
- .
- Operate all controls smoothly.
- Warn other people that you are there by means of flashing lights, sign and cones.
- MAKE SAFETY YOUR No.1 PRIORITY.

NEVER

- Use an unsafe machine.
- Use an access platform to hoist loads like a crane.
- Overload cage/platform.
- Operate in strong winds (Check manufacturer’s recommendation).
- Rest the cage on a structure or object to gain extra support.
- Attach your safety harness to a structure outside of the platform.
- Throw or drop anything from the platform.
- Use boxes, ladders or stand on handrails to gain additional height, if you can’t reach, you need a bigger machine.
- Let an untrained person operate the access platform.
- Take unnecessary risks (hospitals and graveyards are full of dead heroes!)

**In the unlikely event that your machine develops a fault
please contact the Facelift Tech Team on 01444 881100**

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Warning

Failure to comply with your required responsibilities in the use and operation of the aerial platform could result in death or serious injury!

1-17. Operator Safety Reminders

The National Safety Council reminds us that most accidents are caused by the failure of some individuals to follow simple and fundamental safety rules and precautions. Common sense dictates the use of protective clothing when working on or near machinery. Use appropriate safety devices to protect your eyes, ears, hands, feet and body.

You, as a careful operator, are the best insurance against an accident. Therefore, proper usage of this aerial platform is mandatory. The following pages of this manual should be read and understood completely before operating the aerial platform.

Any modifications from the original design are strictly forbidden without written permission from SKYJACK Inc.

1-18. Electrocution Hazard

This aerial platform is not electrically insulated. Maintain a minimum safe approach distance (MSAD) from energized power lines and parts as listed below. Operator **must allow** for platform sway, rock or sag. **This aerial platform does not provide protection from contact with or proximity to an electrically charged conductor.**

DO NOT USE THE MACHINE AS A GROUND FOR WELDING.
DO NOT OPERATE THE MACHINE DURING LIGHTNING OR STORMS.



DANGER

Avoid Power Lines

Minimum Safe Approach Distance

CE Guidance Note

“Avoidance of danger from Overhead Lines”

Adhere strictly to the governmental rulings and regulations applicable in your country.

FAILURE TO AVOID THIS HAZARD WILL RESULT IN DEATH OR SERIOUS INJURY!

1-19. Safety Precautions

Know And Understand The Safety Precautions Before Going On To Next Section.



Warning

Failure to heed the following safety precautions could result in tip over, falling, crushing, or other hazards leading to death or serious injury

- **KNOW** all Federal, State, Provincial and local rules which apply to your MACHINE and JOBSITE.
- **DO NOT** leave the aerial platform unattended with the key in the key switch.
- **WEAR** all the protective clothing and personal safety devices issued to you or called for by job conditions.

- **DO NOT** wear loose clothing, dangling neckties, scarves, rings, wristwatches or other jewelry while operating this lift.



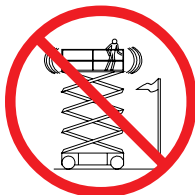
- **AVOID** entanglement with ropes, cords or hoses.



- **AVOID** falling. Stay within the boundaries of the guardrails.



- **DO NOT** raise the aerial platform in windy or gusty conditions.



- **DO NOT** increase the lateral surface area of the platform. Increasing the area exposed to the wind will decrease machine stability.



- **DO NOT** drive or elevate the aerial platform if it is not on firm level surfaces. Do not drive elevated near depressions or holes of any type, loading docks, debris, drop-offs and surfaces that may affect the stability of the aerial platform.



- **If Operation In Areas With Holes Or Drop-offs Is Absolutely Necessary**, elevated driving shall not be allowed. Position the aerial platform horizontally only with the platform fully lowered. After ensuring that all 4 wheels or outriggers have contact with level firm surface, the aerial platform can be elevated. After elevation, the drive function must not be activated.



- **Elevated driving** must only be done on a firm level surface.



- **DO NOT** Ascend or descend a grade steeper than 23% (3215, 3219), or 25% (3220, 3226, 4620, 4626, 4632, 6826 & 6832). Ascend or descend grades only when fully lowered and then only to the maximums noted above.



1-19. Safety Precautions (Continued)

Know And Understand The Safety Precautions Before Going On To Next Section.

- **DO NOT** operate on surfaces not capable of holding the weight of the aerial platform including the rated load, e.g. covers, drains, and trenches.

- **DO NOT** operate an aerial platform that has ladders, scaffolding or other devices mounted on it to increase its size or work height. It is prohibited.



- **DO NOT** exert side forces on aerial platform while elevated.



- **DO NOT** use the aerial platform as a crane. It is prohibited.



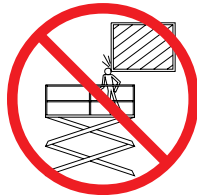
- **DO NOT** sit, stand or climb on the guardrails. It is prohibited.



- **DO NOT** climb on scissor arm assembly. It is prohibited.



- **BE AWARE** of overhead obstructions or other possible hazards around the aerial platform when driving or lifting.



- **DO NOT** raise the aerial platform while the machine is on a truck, fork lift or other device or vehicle.



- **BE AWARE** of crushing hazards. Keep all body parts inside platform guardrail.



- **DO NOT** lower the platform unless the area below is clear of personnel and obstructions.



- **ENSURE** that there are no personnel or obstructions in the path of travel, including blind spots.



- **BE AWARE** of blind spots when operating the aerial platform.
- **STUNT** driving and horseplay are prohibited.
- **ENSURE ALL** tires are in good condition and lug nuts are properly tightened.
- **DO NOT** alter or disable limit switches or other safety devices.
- **DO NOT** use the aerial platform without guardrails, lock pins and the entry gate/chain/bar in place.
- **DO NOT** exceed the rated capacity of the aerial platform. Do make sure the load is evenly distributed on the platform.

1-19. Safety Precautions (Continued)

Know And Understand The Safety Precautions Before Going On To Next Section.

DO NOT overload the platform, the lift relief valve does not protect against overloading when the platform is elevated.

- **DO NOT** attempt to free a snagged platform with lower controls until personnel are removed from the platform.
- **DO NOT** position the aerial platform against another object to steady the platform.

Jobsite Inspection.

- Do not use in hazardous locations.
- Perform a thorough jobsite inspection prior to operating the aerial platform, to identify potential hazards in your work area.
- Be aware of moving equipment in the area. Take appropriate actions to avoid collision.



Warning

Entering and Exiting the aerial platform should only be done using the 3 point contact system.

- Use only equipped access openings and ladders.
- Enter and exit only when the elevating aerial platform is in the fully retracted position

- **Do Use Three Point Contact To Enter And Exit The Platform.** Enter and exit the platform from the ground only. Face the machine when entering or exiting the platform.
- **Three Point Contact** means that two hands and one foot **OR** one hand and two feet are in contact with the aerial platform at all times during entering and exiting.



Warning

An operator should not use any aerial platform that :

- Does not have a clean, uncluttered work area.
- Does not appear to be working properly.
- Has been damaged or appears to have worn or missing parts.
- Has alterations or modifications not approved by the manufacturer.
- Has safety devices which have been altered or disabled.

Failure to avoid these hazards could result in death or serious injury.

Section 2 - Operation

2-20. Pre-start Inspection

It is the responsibility of the operator to perform a Pre-start inspection.

The pre-start inspection is a visual inspection performed by the operator prior to each work shift.

1. Carefully read and completely understand **ALL** of Section 2, OPERATION in this manual and **ALL** warnings and instruction labels on the aerial platform.
2. Ensure that there are no obstacles around the aerial platform and in the path of travel such as holes, drop offs, debris, ditches and soft fill.
3. Ensure that there are no electrical cords and hoses in the path of travel.
4. Ensure that the batteries are fully charged. Disconnect the AC charger cord from the external power source.
5. Ensure that both side battery and hydraulic trays are closed and locked.
6. Ensure that the Free-Wheeling Valve is fully closed.
7. Make sure all guardrails and lock pins are in place and locked in position.
8. Make sure you do not climb or descend a grade steeper than 23% (3215, 3219), or 25% (3220, 3226, 4620, 4626, , 4632, 6826 & 6832). Elevated driving must only be done on firm level surfaces.
9. Check overhead clearances.



Warning

Do not use or operate the aerial platform if any component appears to be altered, damaged or if it is tagged or locked out for non-use or repair. Operation of aerial platform while in any of the above states may result in death or serious injury.

2-21. Operators Checklist

It is the users responsibility to inspect the machine operation before the start of each shift:

1. Operating and Emergency controls.
2. Safety devices and limit switches.
3. Personal protective devices.
4. Tires and wheels.
6. Air, hydraulic and fuel system(s) for leaks.
7. Loose or missing parts.
8. Cables and wiring harnesses.
10. Guardrail system including locking pins.
11. Engine oil level (**If Equipped**).
12. Battery fluid level.
13. Hydraulic reservoir level.
14. Coolant level (**If Equipped**).
15. Parking brake (Check operation).



Warning

Do not operate this aerial platform without proper authorization and training. Failure to avoid this hazard could result In death or serious injury.

Start And Operation



Warning

An operator should not use any aerial platform That:

- Does not appear to be working properly.
- Has been damaged or appears to have worn or missing parts.
- Has alterations or modifications not approved by the manufacturer.
- Has safety devices which have been altered or disabled.

Failure to avoid these hazards could result in death or serious injury.

2-22. Setting the Base Controls:

1. Turn the Main Power Disconnect Switch to “ON” position.
2. At the base control box, pull out Emergency Stop Button.
3. **Using the controls on the platform:**
 - 3a. Use the ladder of the aerial platform to access the aerial platform deck. Close and latch the chain/gate.
 - 3b. At the main control box, pull out the Emergency Stop Button.
 - 3c. Turn key switch to “PLATFORM” position.
4. **To Raise the Platform:**



Warning

Be aware of overhead obstructions or other possible hazards around the machine when lifting.

- 4a. Ensure the emergency stop button is pulled out. Select “LIFT” position with the Lift/Off/Drive Toggle Switch.

- 4b. Activate and hold the Enable trigger switch (by squeezing it towards the joystick).
- 4c. Push the controller handle forward until desired height is reached.
- 4d. Return the joystick to the neutral center position to stop. Release the Enable trigger switch.



Warning

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

Note

If the tilt alarm sounds and the platform does not, or only partially raises, immediately lower the platform and ensure that the machine is on a firm **LEVEL** surface.

5. **To Lower the Platform:**



Warning

Do not lower the platform unless the area below is clear of personnel and obstructions.

- 5a. Activate and hold the Enable trigger switch (by squeezing it towards the joystick).
- 5b. Pull the controller handle backward until desired height is reached.
- 5c. Return the joystick to the neutral center position to stop. Release the Enable trigger switch.



Warning

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

Note

Platform lowering is not proportional.

6. **To Drive Forward or Backward:**



Warning

Limit travel speed according to conditions.



Warning

Be aware of blind spots when operating the aerial platform.

- 6a. Ensure the emergency stop button is pulled out. Select “DRIVE” position with the Lift/Off/Drive Toggle Switch.
- 6b. Activate and hold the Enable trigger switch (by squeezing it towards the joystick).
- 6c. Push or pull the controller handle forward or backward to the desired speed and direction of platform travel.
- 6d. Return the joystick to the neutral center position to stop. Release the Enable trigger switch.



Warning

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.



Warning

If the machine does not drive when elevated

- Disengage the drive controller.
- Lower the platform immediately.
- Check that the pothole protection device is operating properly, and ensure that there are no electrical cords or hoses in the path of travel, or under the pothole protection bar.
- Ensure the machine is being operated on a compacted, firm level surface or the tilt sensor will disable some or all functions.

7. **To Increase Drive Torque (If Equipped)** - Toggle The “HIGH/ NORMAL TORQUE” switch to select high torque (low speed) or normal torque (high speed). Select “HIGH” position when climbing grades or when loading or unloading the aerial platform, select “NORMAL” position when traveling on a level surface with the platform fully lowered.



Warning

Machine must be in fully retracted position when operated on any grade. Driving while elevated on any grade may result in death or serious injury.

- 8a. **To Steer:** Select “DRIVE” position with the Lift/ Off/Drive Toggle Switch.
- 8b. Activate and hold the Enable trigger switch (by squeezing it towards the joystick), then press the rocker on top of the controller handle in the direction you wish to steer.
- Note:** Steering is not proportional.
9. **To Sound the Horn:** Depress the horn push-button located on the side of the operator’s platform control box.

10. **To extend/retract the variable position manual extension deck:**



Warning

Ensure that there are no personnel or obstructions in the path of travel, including blind spots.

- Remove the retaining locking pins and push/pull the extension deck using the push bar or sliding handrails to one of three desired locking positions.
- Reinsert the locking pins. Insert the pin on one side of the machine in front of the upright bar and the pin on the other side of the machine behind the upright bar to prevent accidental movement, in either direction, of the manual extension platform during travel or transport (Refer to “figure 2-11” for a configuration example).

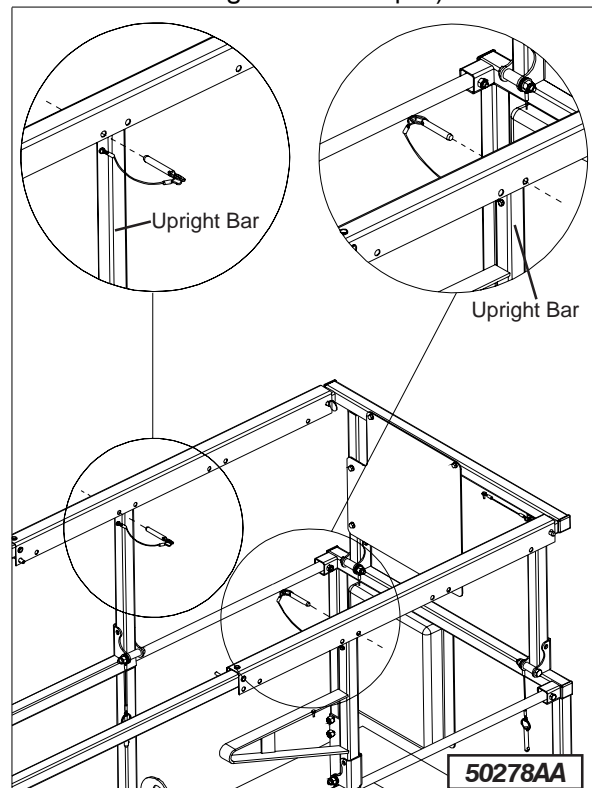


Figure 2-11. variable position manual extension deck



Warning

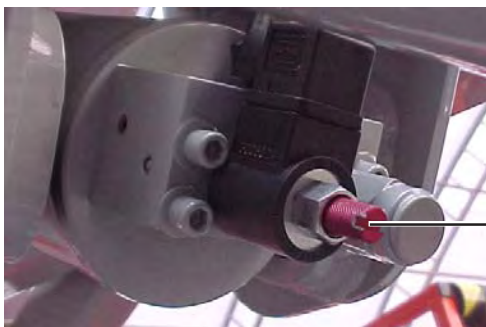
To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

2-23. Shutdown Procedure

1. Completely lower the platform.
2. Turn Key Switch to “OFF” position. Remove key.
3. Push Emergency Stop Button(s) in.
4. Turn Main Power Disconnect Switch to “OFF” position.
5. Push in Emergency Stop Button located on Base Control Box.

2-24. Emergency Lowering System

Emergency Lowering System - This system allows platform lowering in the event of an emergency or an electrical system failure.



3. **Emergency Lowering Valve** - Located at the front of the hydraulic/electric tray (item 1), this pull-type valve when used in conjunction with the holding valve manual overrides, allows platform lowering in the event of an emergency or electrical system failure.
4. To restore normal operation, depress and turn the holding valve override knobs clockwise.



Warning

Keep clear of scissors mechanism when using emergency lowering valve.

Figure 2-12. Emergency Lowering System

1. Turn Main Power Disconnect Switch to “OFF” position.
2. **Holding Valve Manual Override Knob** - Located on the holding valve at the bottom of each lift cylinder (item 2), these red knurled knobs when depressed and turned counterclockwise allow hydraulic oil to bypass each holding valve. The red knurled knobs on each holding valve **MUST** be depressed and turned clockwise to restore normal operation. **An access rod for reaching the elevated manual override knob is provided (item 3).**

2-25. Winching And Towing Procedures



Warning

Ensure platform is fully lowered before winching or towing. Sudden motion could cause the aerial platform to become unstable. Death or serious injury could result.



Warning

When pushing, towing or winching,
Do not exceed 2 mph (3.2 km/h).



Warning

Do not push, tow or winch either vehicle on to a slope, or brake the towing vehicle rapidly. Do not pull the aerial platform down an incline towards a winch.



Warning

Do not manually disengage the parking brakes if the aerial platform is on a slope.

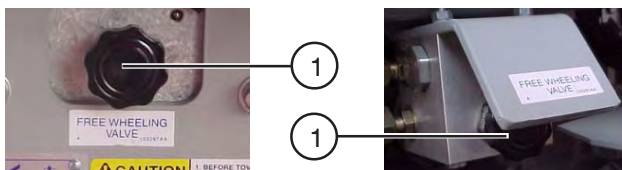


Figure 2-13. Free-Wheeling Valve

1. Make sure that the aerial platform is on level ground. Chock or block the wheels to keep aerial platform from rolling.
2. **Free-Wheeling Valve** - Turning the valve knob (counterclockwise) to a fully opened position allows fluid to flow through the wheel motors, thus providing “free-wheeling”.

3. **Parking Brake** - The brake pins **MUST** be manually disengaged for pushing, towing or winching.



Figure 2-14. Parking Brake

- **For Left-Hand Brake:** Using a 19mm wrench, rotate the lock-out block on the brake pin 90° clockwise. The brake pin should be clear of the brake disc.
- **For Right-Hand Brake:** Using a 19mm wrench, rotate the lock-out block on the brake pin 90° counterclockwise. The brake pin should be clear of the brake disc.

2-26. Preparation After Winching Or Towing

- Position machine on a firm, level surface.
- Chock or block the wheels to keep aerial platform from rolling.
- Engage the parking brake by momentarily activating the drive function.
- Close free-wheeling valve.

Note

The SJIII Series aerial platform is now ready for use by an authorized, qualified operator who has read and completely understands **ALL** of Section 2, OPERATION in this manual.

2-28. Battery Charger

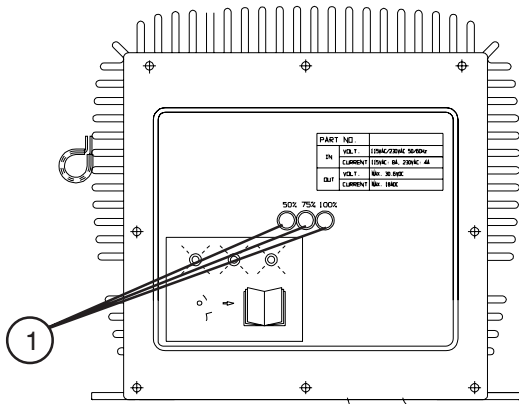


Figure 2-15. Battery Charger

Operation Of Charger



Danger

Risk of electric shock. Do not immerse the charger in water. Though the charger is highly resistant to water, it is not designed for immersion and an electric shock can occur.

1. Provide adequate ventilation for the batteries and charger. The convection cooled design requires access to cooling air for proper operation. Do not allow blankets or other materials to cover the charger. Though the charger protects itself against overheating, the charger cooling fins should be cleaned if clogged with debris for best performance.



Warning

There could be a spark during charging. Be careful when using fuels, solvents or other flammables near the charger or batteries.

2. Connect the power supply cord to a properly grounded 100V/50 or 60Hz, 115V/ 60Hz, or 230V/50 or 60Hz socket. This charger automatically senses and adjusts to the AC input voltage range.



Caution

When changing the input voltage wait until all the LED's are OFF or wait a minimum of 20 seconds before switching on the new voltage.

3. The charging time is affected by numerous factors including battery Amp-Hour capacity, depth of discharge, battery temperature, and battery condition (new, old, or defective). Batteries larger than 240 Ah can be recharged but will take longer.



Danger

Do not disconnect the DC output wires near the batteries when the charger is ON. The resulting arcing could cause the batteries to explode. If the charger must be disconnected, first disconnect the AC power supply cord from its outlet, then disconnect the charger DC connections.



Danger

Risk of an electric shock. Do not touch un-insulated parts of the charger output wires, battery connector, or battery terminals.



Danger

Visually and manually inspect to verify the DC output wires and terminals are in good working condition before each use.

4. The charger will start automatically within four to six seconds. The charger will start even with severely discharged batteries (down to 1V terminal voltage). Once charging starts, the LED's indicate the charging progress.

Charging State LED

State of charge	1 ST LED	2 ND LED	3 RD LED
0 to 50%	Blinking	Off	Off
50% to 75%	On	Blinking	Off
75% to 100%	On	On	Blinking
100%	On	On	On

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The charger goes into an equalizing charge mode after the batteries are charged and all 3 LEDs are "ON". The charger will continue to charge at a low current then shut-off automatically when complete.

If all 3 LEDs blink together, there is a problem.

Take proper action according to the following instructions:

3 LEDs blink once simultaneously: Output connection error. Check the battery and charger connection. The output may not be connected to the batteries or the connections to the batteries may have corroded or loosened. The output may be shorted due to improper connection to the batteries or pinched wires. The output may be connected in reverse polarity to the batteries. The charger is not damaged by any of these problems.

3 LEDs blink twice simultaneously: The charger is indicating that the AC voltage is too low or too high. Check the AC input voltage.

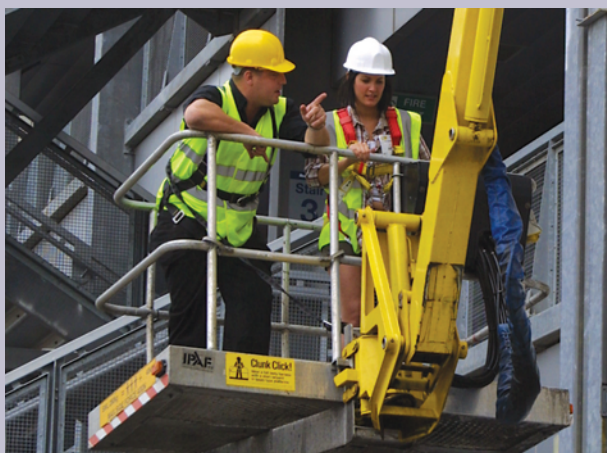
3 LEDs blink three times simultaneously: Charger is overheated. No action required. When the charger cools, charging will re-start automatically. Check and correct for dirt or other debris on charger that may be reducing cooling.

3 LEDs blink four times simultaneously: Input or output over current. No action required, charger will correct and re-start automatically.

Batteries do not fully charge. If the batteries are charged overnight, make sure the AC supply is not being switched-off at night with other building items. Check battery condition and for dead cells or reduced capacity. Replace charger only if other problems are not found.

The AC line circuit breaker or fuse is blown. A defective circuit breaker or fuse, an overloaded circuit, or a charger problem can cause this condition. Try connecting the charger to a different AC outlet (on a different circuit) in the building. If the AC supply checks good, the charger should be replaced.

operator training centre



When hiring access equipment we strongly recommend taking advantage of one of our operator training courses.

As Facelift is an accredited IPAF (Independent Powered Access Federation) training centre you can be sure that your staff will be trained to a high standard and receive an internationally recognised qualification.

Courses can take place on your own premises or at one of our training centres, situated in Hickstead, Iver, Southampton, Liverpool, Birmingham and Basildon.

We can train your personnel on any of the following equipment:

- **(1a) Static Vertical**
Vertical Personnel Platform (static)
- **(1b) Static Boom**
Self Propelled Boom with outriggers, Trailer/Push around, Vehicle Mounted Platform up to 26m and Vehicle Mounted Platform over 26m*
- **(3a) Mobile Vertical**
Scissor Lifts, Vertical Personnel Platform (mobile)
- **(3b) Mobile Boom**
Self Propelled Boom
- **Specialist Machines**
Spider*

The one day course covers site safety, practical demonstration, sole usage, site risks and includes a theory test

* Two day courses are required for the Spider and Vehicle Mounted Platforms over 26m

Successful candidates are issued with the IPAF PAL card, widely accepted by both the CITB and Health And Safety Executive.



We also run the following courses:

MEWPs for Managers
Loading and Unloading
Harness Use and Inspection
PASMA Aluminium Tower Training
BLMA Ladder Training

For further information or to arrange a training course contact us today on:
0800 072 55 72 or **training@facelift.co.uk**